

Amendments to the Specification:

Please replace paragraph [0009] in its entirety with the following paragraph. The following replacement paragraph is marked to show changes made.

[0009] A multiple-input ballast having a processor for controlling a gas discharge lamp in accordance with the present invention includes a processor, such as a microprocessor or digital signal processor (DSP), for receiving multiple inputs and controlling a discharge lamp in response to the inputs. The lamps include compact and conventional gas discharge lamps. The multiple processor input terminals are all active concurrently. The ballast processor uses these inputs, along with feedback signals indicating internal ballast conditions, to determine the desired intensity level of the lamp. Input signals provided to the processor include analog voltage level signals (such as the conventional 0-10 V analog signal for example), though it is understood that other voltage ranges or an electrical current signal could be used as well, digital communications signals including but not limited to those conforming to the Digital Addressable Lighting Interface (DALI) standard, phase control signals, infrared sensor signals, optical sensor signals, temperature sensor signals, sense signals derived from wired and/or wireless external devices, and sense signals providing information pertaining to electrical parameters such as current and voltage of the AC power supply (e.g., line) and the lamp. The ballast can also receive commands from other ballasts or a master control on a digital communication link, such as a DALI protocol link. This communication link is preferably bi-directional, allowing for the ballast to send commands, information regarding the ballast's settings, and diagnostic feedback to other devices on the communication link. The multiple-input ballast does not need an external, dedicated controller to control the lamp. A system of multiple-input ballasts can be configured as a distributed system, not needing a controller, and thus not creating a single point failure as in controller centric systems. However, a system of multiple-input ballasts can be configured to include a controller if desired. Each ballast processor contains memory. The processor memory is used, among other things, to store and retrieve set point algorithms, or procedures, for controlling the lamps in accordance with priorities and sequence of commands received via the ballast input signals. Also, a portion of the data stored in the processor memory can include information relating to the ballast's location and/or the ballast's duties in a system.

Please replace paragraph [0029] in its entirety with the following paragraph. The following replacement paragraph is marked to show changes made.

[0029] Figure 2 is a block diagram showing various exemplary signals provided to the processor 30 via processor terminals in accordance with an exemplary embodiment of the present invention. For the sake of clarity, some of the circuitry shown in Figure 1 is represented collectively as other ballast circuitry 51 in Figure 2. Further for the sake of clarity, only a subset of the processor terminals is labeled (34a, 34b, 34c, 34d) corresponding to the ballast input signals 34 shown in Figure 1. The ballast input signals 34 can comprise any appropriate signals for controlling the lamp 32. As shown in Figure 2, exemplary ballast input signals comprise a phase controlled input signal coupled to processor terminal 34a, a communications signal coupled to processor terminal 34b, an analog voltage signal coupled to processor terminal 34c, and an electrical signal from an infra-red (IR) receiver coupled to processor terminal 34d. It is emphasized that the ballast input signals shown in Figure 2 are exemplary. Other types and number of ballast input signals are applicable, for example, the processor can be coupled to multiple IR signals, multiple analog voltage or current signals, power line carrier signals, and two-state signals including, but not limited to, a contact closure signal from an occupancy sensor. In an exemplary embodiment, a transducer is in electrical communication with the microprocessor for providing a signal perceptible to a person, such as an audible signal for example.